

REMARKS

In the action dated February 26, 2002, the Examiner notes that the Amendment filed April 6, 2002, presents amendments which do not comply with 37 C.F.R. §1.173(b) which sets forth the manner of making amendments and reissue applications. Consequently, Applicant hereby submits with the present Response a corrected Preliminary Amendment which complies with 37 C.F.R. §1.173(b).

In the Action, the Examiner has rejected Claims 1, 2, 5, 7 and 8 under 35 U.S.C. §102(e) as being anticipated by *Diab, et al.*, U.S. Patent No. 5,782,757. That rejection is respectfully traversed.

The claims in the present Application are directed to a specific embodiment of a non-invasive electro-optical sensor for removable adhesive attachment to the fingertip of a patient for use in measuring light extinction during transillumination of the blood-profused tissue within a fingertip. The sensor of the present claims includes an opaque, semi-cylindrical, substantially rigid cradle member having a concave surface and a convex surface and "a flexible, initially substantially planar web-like support structure attached at one end thereof to said cradle member . . ." A careful examination of the *Diab, et al.* reference reveals that the Examiner has inadvertently combined two separate embodiments of the *Diab, et al.* probe in a manner which is neither suggested by that reference nor consistent with the teachings of *Diab, et al.*

Specifically, the Examiner notes the presence of a rigid, opaque saddle or cradle member formed from black plastic as illustrated in Figures 16, 18 and 20. As expressly set forth within *Diab, et al.*, at column 14, lines 53, *et seq.*, Figure 16 depicts "a perspective view of another probe 400 of the present invention specifically designed for use with a digit, such as a finger or a toe." Thereafter, at column 15, lines 57, *et seq.*, *Diab, et al.*, describe the manner in which saddle 410 is utilized in the embodiment of finger probe 400. Specifically, *Diab, et al.*, note "an LED 430 is affixed to the finger 428, generally opposite the aperture 420. The LED 430 is typically attached to the finger 428 via adhesive, such as medical tape. The LED 430 is advantageously aligned along the central axis 424 to optimize the amount of light transmitted directly through the finger 428 onto the photodetector 426."

Thus, those having ordinary skill in the art, upon reference to the embodiment of probe 400 depicted within Figures 16, 18, 19 and 20 will clearly note that *Diab, et al.*, teach the mounting of LED 430 to the patient's finger utilizing adhesive, such as medical tape and that the LED is not mounted within the web of the support structure which is attached at one end thereof to the cradle member as set forth expressly within the claims of the present Application.

The flexible adhesive element noted by the Examiner at column 23, lines 50 through column 24, line 34, is described within the context of another embodiment of the *Diab, et al.* probe. Specifically, optical probe 2002 is depicted within Figures 29A-29B, as expressly set forth by *Diab, et al.*, at column 23, lines 50, *et seq.* As further described in that portion of the *Diab, et al.* specification, optical probe 2002 comprises a pair of adhesive flanges 2005 which extend from a central portion 2004 which serve to retain a human finger between detector assembly 2035 and the emitter. It should therefore be abundantly clear to those having ordinary skill in the art that this embodiment of *Diab, et al.*, contemplates a completely flexible adhesive probe which can be wrapped around a human fingertip. There is no suggestion at all within *Diab, et al.*, for a combination of the flexible web which mounts the emitter of the embodiment of Figures 29A and 29B with the rigid cradle of the embodiment of Figures 16, 18, 19 and 20 and further, as noted above, *Diab, et al.*, expressly teaches away from such an embodiment in that *Diab, et al.*, expressly describes the mounting of LED 430 to a patient's finger utilizing medical tape in conjunction with the embodiment of Figures 16, 18, 19 and 20.

In view of this express teaching and the failure of *Diab, et al.*, to show or suggest in any way a flexible web mounted at one end thereof to a rigid cradle, Applicant urges that the Examiner's rejection of Claims 1, 2, 5, 7 and 8 under 35 U.S.C. §102(e) as being anticipated by *Diab, et al.*, is not well founded and withdrawal of that rejection is respectfully requested.

The Examiner has also rejected Claims 3 and 4 under 35 U.S.C. §103(a) as being unpatentable over *Diab, et al.*, noting that although *Diab, et al.*, teach a rigid opaque cradle or saddle, they do not teach the specific material from which that saddle may be formed. Applicant agrees that the teaching of black plastic within *Diab, et al.*, for the construction of the cradle is probably sufficient to support a rejection under 35 U.S.C. §103(a) as to specific claims to molded polyolefin

plastic, or polypropylene; however, as *Diab, et al.*, for the reasons set forth above, fails to show or suggest in any way the provision of a probe having a rigid cradle and a flexible support structure attached at one end thereof to the cradle member, Applicant urges that this rejection is also not well founded and that it should be withdrawn.

The Examiner has also rejected Claims 10-14, 16 and 17 under 35 U.S.C. §103(a) as being unpatentable over *Diab, et al.*, in view of *Swedlow, et al.*, U.S. Patent No. 5,209,230. That rejection is also respectfully traversed. The Examiner cites *Swedlow, et al.*, for its teaching that the emitter may be located within the rigid cradle and the detector in the flexible web member; however, Applicant urges that the combination of *Swedlow, et al.*, with *Diab, et al.*, adds nothing to the teaching of *Diab, et al.*, as *Diab, et al.*, teaches at column 15, lines 62, *et seq.*, that the positions of the photodetector and light emitting diode can be interchanged.

Further, Applicant urges that *Swedlow, et al.*, fails to show or suggest the invention set forth in the present Application, whether considered alone or in combination with *Diab, et al.* Specifically, *Swedlow, et al.* teaches, in a manner similar to that of *Diab, et al.*, the utilization of a deformable pad 18 which preferably includes a photodetector which is utilized in conjunction with a "disposable, flexible member" which contains the photo emitter and which "can be wrapped around the patient's appendage to secure it to the appendage and the reusable member." (See the Abstract). Additionally, Applicant notes that webbing 12 is attached to housing 14 and not to deformable pad 18 or a rigid cradle in a manner which might be suggestive of the invention set forth within the claims of the present Application. Thus, neither reference cited by the Examiner shows or suggests in any way the combination of a rigid cradle member which is attached to a flexible support member at one end of that flexible support member in the manner which is expressly set forth within the claims of the present Application and Applicant urges the Examiner to withdraw the rejection of these claims and reissue the present Application.

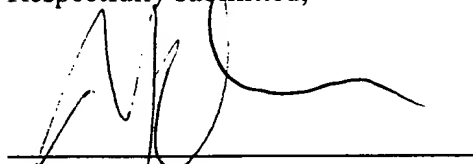
The Examiner has indicated the allowable nature of Claims 6, 9, 15 and 18 and Applicant gratefully acknowledges that indication. However, for the reasons set forth herein, Applicant urges that Claims 1-18 all set forth allowable subject matter and withdrawal of all rejections is respectfully requested.

Additionally, the Examiner includes a request for a return of the original patent which Applicant noted had been submitted to the Patent and Trademark Office for correction of the named Inventors. A review of Applicant's files reveals that the corrected Issued Patent has been returned to Applicant and that corrected original patent is submitted herewith pursuant to the Examiner's request.

In summary, Applicant urges that none of the references cited by the Examiner show or suggest in any way the novel combination of a rigid cradle having a flexible support member attached at one end thereof in the manner set forth within the present claims and withdrawal of all rejections and passage of this Application to issue is therefore respectfully requested.

A request for a one month extension of time and a check for the appropriate fee are enclosed herewith. No additional extension of time is believed to be required; however, in the event any additional extension of time is required, please consider that extension requested and please charge the fee for that extension, as well as any other fee necessary to further the prosecution of this Application to Deposit Account No. **50-0259**.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Andrew J. Dillon', is written over a horizontal line.

Andrew J. Dillon

Reg. No. 29,634

BRACEWELL & PATTERSON, L.L.P.

Suite 350, Lakewood on the Park

7600B North Capital of Texas Highway

Austin, Texas 78731

(512) 542-2100

ATTORNEY FOR APPLICANT(S)